

Firecom Pty Ltd. 22 Agatha Avenue Lake Munmorah NSW 2259 Ph: (02) 4358 2281 Fax: (02) 43582284 firecom services@bigpond.com

12th April 2017

Reference: FAA Evac 17

Flyash Australia. Po Box 316 MORISSET NSW 2264

Ph: (02) 4973 3622 Fax: (02) 4973 2806

Attention: MARK FULLICK

RE: Report Emergency Evacuation Exercises Conducted 12th April 2017

# **STAFF PRESENT:**

Chief Warden for this Exercise: Kirk Inman

Mark Fullick, Peter Parkhill, Paul Kew, John Keys, Paul Mecham

Observers: John Brown, Tracey Hughes (Firecom)

Assembly Area used: Assembly Area A

9.30am: Staff briefing prior to conducting evacuation exercises.

Evacuation Exercise Scenario - Initiate emergency response to a major fuel spill from a vehicle in weighbridge area, external notification to emergency services and control the incident.

Time	Response
10.02am	Fuel spill identified by site visitor and notified to a Flyash Employee Kirk Inman.  Kirk assumed the role of Chief Warden
10.02am	Kirk attempted to activate the site alarm using the key pad in the control room to initiate a staff response to the emergency affected area. This was unsuccessful.
10.03 am	The hand-held megaphone was produced from the control room and activated to sound an alarm.  Staff proceeded to arrive at the emergency control point outside the Control Room.  Chief Warden instructed Paul to inform drivers on the gantry area what the problem was and instructed them to proceed to the nominated assembly area.  Chief Warden instructed to go to the control room and isolate the out-loading area to stop loading.  John Keys went to the Administration to evacuate persons from this area and pick up the visitor's book and First Aid Kit.
10.04 am	Gantry and weighbridge area confirmed clear of personnel. Chief Warden assessed the full extent of the fuel spill. Paul Mecham instructed to retrieve MSDS Sheets from the emergency information cabinet. Report received from John Keys that staff were accounted for and there were no first aid casualties.
10.05 am	Chief Warden instructed a staff member to contact Eraring Power Station 5555 and Emergency Services 000 and requested assistance. They then reported back to the Chief Warden.  Chief Warden investigated the spill location and assessed the rate and direction of the flow.  Peter Parkhill and Paul Kew instructed to retrieve the Spill kit from the maintenance workshop.
10.06 am	Paul Meecham returned from the emergency information cabinet after retrieving emergency information from the cabinet. Emergency Information was made available at the incident scene.  Paul allocated to undertake traffic control to prevent vehicles from coming into the site.
10.07 am	A staff member was then instructed to isolate power.

10.08 am	Power isolation was confirmed back to the Chief Warden.
10.08 am	Reassessment of the wind direction and fuel spill flow rate and direction taken into account.
10.09 am	Peter Parkhill and Paul arrived back at the scene and placed booms out below the spill to absorb the spilt fuel.  Staff instructed to stand upwind and away from the spill area and to continue to monitor the direction and flow of the fuel spill.  Source of the fuel spill was isolated by the Chief Warden.  EPA advised of spill.
10.10 am	Arrival of Emergency Services Report requested as to the status of the plant. Report stated that there had been a fuel spill from a vehicle which was parked under the gantry area. Flyash plant had been shut down. Power at the site had been isolated. Emergency absorbent booms had been deployed to prevent fuel from running into the drain system. Source of the spill had been isolated. The emergency affected area had been cleared of personnel. Emergency Information and site evacuation diagrams were made available. Dry Chemical Powder fire extinguisher had been taken to the incident scene. The rest of the site had been evacuated to Assembly Area A and there were no injured personnel. The report was satisfactory.
10.11am	Dry Chemical Powder fire extinguisher brought to the scene of the spill.
10.11am	Incident Terminated-Staff returned to Administration building for Evacuation Debriefing.

## **INCIDENT DURATION:**

Time taken to evacuate site occupants and deal with the emergency situation from notification to completion of the exercise Eight (8) minutes

## **EVACUATION OVERVIEW:**

Following is an overview of what transpired and any recommendations arising from this Emergency Exercise.

## FIRE ALARMS - COMMENCEMENT OF THE EXERCISE

An attempt was made to activate the security/fire alarms keypad to raise an alarm for the exercise. Unfortunately, this failed. The hand-held megaphone was produced and used to alert personnel on site. Staff responded immediately and made their way to the Emergency Control Point. Recommend review of written instruction for activation of security alarm.

# COMMUNICATION

Communications between the Chief Warden and staff members and designation of tasks was good.

A very good response was achieved from all staff and they immediately carried out instructions issued by the Chief Warden.

Reporting back to the Chief Warden by other staff following completion of their designated tasks was also very good.

When staff arrived at the incident scene they were informed as to the extent of the emergency.

A quick explanation to clarify what the emergency situation was gave staff a clear understanding of what was required of them in response to this type of emergency.

### STAFF RESPONSE

All other staff and drivers not involved in the exercise were directed to evacuate to the nominated Assembly Area A. All visitors, drivers and staff were accounted for at Assembly Area A.

### INCIDENT SCENE

At the commencement of the exercise the following was taken into account to minimize the risk to Flyash staff responding to the incident. The type of material leaking, quantity released and flow rate, location and direction of the flow, wind direction, number and nature of casualties if any, effect or possible effect on personnel the environment plant or equipment

Once booms were put in place around the spill the Chief Warden made appropriate correctional changes and moved members of the response team away from the area. Fuel spill was isolated at the source.

## EMERGENCY EVACUATION PLAN/ EMERGENCY PROCEDURES

It was noted that a site emergency evacuation diagram and other relevant emergency information was made available at the incident

scene for responding emergency services. Emergency Procedures check sheet was used by the Chief warden to assist with coordination of the exercise.

#### FIRST AID

A Portable First Aid kit was picked up by John and taken to the emergency Assembly area. Information was relayed back to the Chief Warden that there were no injured personnel.

## VEHICLE ACCESS/ENTRY

A staff member was allocated to prevent vehicles entering the site.

The location of the emergency incident and changes in the wind direction were taken into account.

It has been suggested previously that in the event of a real emergency that the main access security gate is contacted and instructed to restrict vehicle access to emergency response vehicles only and to prevent all pedestrian access.

## **EMERGENCY SERVICES**

External emergency services were contacted **000**. (Power Station Emergency Response team **(555)** were notified in this instance and it was confirmed that it was only a practice exercise.

The report given by the Chief Warden to responding emergency services was very thorough and precise. Well done!

EPA contacted and an explanation of the emergency incident was reported.

#### MATERIAL SAFETY DATA SHEETS

On arrival of emergency services, the material safety data sheets were requested by the senior officer.

The register of chemicals and copies of the material safety data sheets from inside the emergency information cabinet, were available in a folder.

## POTENTIAL FIRE SITUATION

As this was an exercise involving a major fuel spill consideration needed to be given to the immediate impact and potential outcome of spilt fuel on the ground possibly resulting in is a serious fire situation.

A Dry Chemical Powder fire extinguisher was picked up from outside the control room and taken to the incident scene some eight (8) minutes after it was identified as a major fuel spill. Early intervention and use of a Foam fire extinguisher to cover the spilt fuel in this case would have minimized the risk of ignition to vapors given off from the fuel and possibly preventing a very serious fire situation. As this is a possible real-life scenario Firecom strongly recommend installation of a 45 Litre Mobile Foam Fire\_Extinguisher. This will provide vital fire protection to the complete Gantry and loading areas.

## SUMMARY:

The initial response to the scene delayed by non-activation of the alarm system, however once notified staff members acted promptly and and responded to the emergency control point.

The Chief Warden's communication and physical directions was very good and he remained calm throughout the exercise.

Warden's communication throughout the exercise was very good and they responded to deal with the emergency situation quickly and calmly, carrying out the various tasks asked of them.

The debriefing that was conducted highlighted that this was a much improved in that the wind direction and flow rate of the fuel was taken into account and the spill was isolated and contained quickly.

Staff understood what their appropriate roles were and those responding to the incident did not place themselves at risk.

Recommend that the spill kit is relocated from the workshop installed adjacent to the control room for easier access.

It is difficult to instill realism into any emergency response and evacuation exercises.

This exercise has highlighted the difficulty in dealing with an emergency situation which can and will change at a moment's notice. Response to all emergencies requires a combined team effort to successfully control, evacuate personnel and deal with the emergency incident. A great team effort and good communication was evident throughout this exercise.

We strongly recommend that regular emergency evacuation exercises are undertaken at six (6) monthly intervals to ensure that all staff are well practiced and understand their roles in dealing with a potential emergency situation.

Continued trial evacuation exercises will improve evacuation times, skills and knowledge for all staff in any possible life and or property threatening situation. "Awareness is the key to prevention!"

Thank you to all of the staff involved in this exercise.

Yours in Training

John S. Brown Manager FIRECOM Pty Ltd.